Prescribing considerations

**Why was the GMMMG COPD management plan developed?**

To address the following issues:

- Multitude of different inhalers and inhaler types\(^1\)
- Probable overprescribing of inhaled corticosteroids\(^2\)
- Variation between CCGs in admission rates and spend on respiratory drugs\(^3\)
- In patients with COPD, there is poor correlation between symptoms, FEV1 and exacerbations\(^4\)

**Why is this important?**

- Inhalers have to be used correctly and consistently or the benefits expected from medications will not be realised\(^8\)
- High dose inhaled corticosteroids are associated with serious side effects\(^2\)

What would good practice look like?

- Smoking cessation advice given at every opportunity (if applicable)\(^5\)
- Patients are reviewed at appropriate intervals, including inhaler technique\(^6\)
- Patients have inhalers of similar type (as use of different types is associated with more errors\(^7\))
- Inhaled corticosteroids may be withdrawn in patients at low risk of exacerbation\(^4\)

What outcomes should I be measuring?

- Any change in corticosteroid prescribing
- Any change in exacerbations of COPD
- Any change in COPD referral or admission rates

Prescriber action points:

- Ensure familiarity with the choice of inhalers within the management plan, and be able to demonstrate their use to patients correctly
- Be aware of the spacers that are appropriate for use
- Check inhaler technique
- Ensure reviews take place at appropriate intervals
- Ensure patients are referred to specialist services when necessary
### Efficacy
- All inhaled steroids are of equal efficacy
- All inhaled LAMAs are probably of equal efficacy. There may be minor differences in speed of onset.
- There is some evidence that indacaterol is better than other LABAs at reducing exacerbation rates and improving breathlessness\(^9\).
- Dual bronchodilator therapy improves patient reported dyspnoea and lung function compared to placebo and single bronchodilators (references provided with management plan).

### Safety
- High dose inhaled corticosteroids are associated with serious side effects
- Inhaled steroids increase the risk of pneumonia in COPD patients\(^10\)
- Prescribe by BRAND and DEVICE

### Cost
- An inhaler guide has been produced to support the management plan which includes prices\(^11\)

### Patient factors
- Options are once or twice daily
- Preferred option once daily
- Different inhaler devices to support different levels of dexterity; aim to be consistent with types e.g. all DPI, all MDI.
- Dual bronchodilator therapy reduces exacerbations compared to monotherapy\(^12\)
- A trial of a LABA–LAMA regimen of indacaterol–glycopyrronium showed not only non-inferiority but also superiority to the LABA–inhaled glucocorticoid regimen of salmeterol–fluticasone in reducing the rate of exacerbations\(^13\)
References

1. MIMS July 2016
3. GM Shared Service IMPACT Tool.
5. NICE guidelines [CG101]: Chronic obstructive pulmonary disease in over 16s: diagnosis and management
6. NICE Quality Standard [QS10]: Chronic obstructive pulmonary disease in adults